

Mumbai University

Question Paper

**[IDOL – REVISED COURSE]
(OCTOBER – 2016)**

PAPER - I

**INTERNET
TECHNOLOGIES**

Time: 3 Hours**Total Marks:** 100**N.B.:** (1) All Question are Compulsory.

(2) Make Suitable Assumptions Wherever Necessary And State The Assumptions Made.

(3) Answer To The Same Question Must Be Written Together.

(4) Number To The Right Indicates Marks.

(5) Draw Neat Labeled Diagrams Wherever Necessary.

(6) Use of Non – Programmable Calculator is allowed.

Q.1 ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

- (A) Write a note on Classfull IPv4 Addressing. (5)
- (B) Explain Algorithm for Output Module in ARP. (5)
- (C) Explain any two Timers in TCP. (5)
- (D) Explain Headers in HTTP Protocol. (5)

Q.2 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

- (A) Write a note on IPv6 Addressing. (5)
- (B) Explain how Fragmentation is done in IPv4. (5)
- (C) Write a short note on ARP. (5)
- (D) Write a note on Mobile IP. (5)
- (E) Explain Cache Control Module in ARP. (5)
- (F) Draw a neat diagram of ARP Frame (req & reply). (5)

Q.3 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

- (A) Write a note on ICMP Time Exceeded Message Type. (5)
- (B) Explain RIP Version 2 Message Format. (5)
- (C) Write a note on Dijkshtra's Diagram. (5)
- (D) Explain Link State Routing. (5)
- (E) Explain Path Vector Routing. (5)
- (F) Explain BGP Update Message. (5)

Q.4 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

- (A) Write a short note on SCTP Protocol. (5)
- (B) Write a note on Silly Window Syndrome created by Sender. (5)
- (C) List & explain any two SCTP Packets. (5)
- (D) Write a note on TCP's four – Way Hand Shake Protocol. (5)
- (E) Write a note on UDP Services. (5)
- (F) List different mandatory fields in TCP and explain any two. (5)

Q.5 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

- (A) Write a short note on Rlogin. (5)
- (B) Write a note on distribution of Name Space. (5)
- (C) Explain DHCP Protocol. (5)
- (D) Explain different SSH Components. (5)
- (E) Explain Command processing in FTP. (5)
- (F) Differentiate between TFTP & FTP. (5)

[TURN OVER]

Q.6 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

- (A) Explain MPEG Compression Technique. (5)
- (B) Explain Request & Response in HTTP. (5)
- (C) Explain role of MIB. (5)
- (D) Write a note on MIME Headers. (5)
- (E) Explain commands in SMTP. (5)
- (F) Write a note on Dynamic Documents. (5)

Q.7 ATTEMPT ANY THREE QUESTIONS: (15 MARKS)

- (A) Write a note on Socket Programming. (5)
 - (B) Write a UDP Socket program which reads a string from client, calculate its length and sends it back to the client. (5)
 - (C) Write a TCP Server Socket program which reads a message from client and echoes it back to the client. (5)
 - (D) Explain how packets can be created in UDP Programming. (5)
 - (E) Write a note on Server Socket. (5)
 - (F) Explain how Multiple Client Sockets can be created. (5)
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